Data
on Demand
with Unidisc

Low Cost Random Access Storage for UNIVAC 1004 and 1005 Computers

Unidisc provides:

Random Access

Unidisc adds data processing flexibility to 1004 and 1005 Systems. Many applications which require non-sequential searches through masses of data are now practical for the punched card user. For these, Unidisc offers random access data processing—high speed random access to large files of information stored on interchangeable discs.

Information stored in tracks on the Unidisc surface is accessed by movable read/write heads. Simplified programming methods direct a read/write head to the track in which the desired information is stored, locate the data, and transfer it to the UNIVAC 1004/1005 Central Processor. The 1004/1005 is not interlocked during Unidisc operations. Both units operate independently until the information is available, then work together to transfer information at microsecond speeds.

Take the case of a typical order processing application. With the entry of the data from the source document, a UNIVAC 1004/1005 System equipped with Unidisc can produce a final invoice, and update files affected by the transaction, including inventory and accounts receivable. In addition to providing back-order information, data for producing purchase orders, product history files, and sales analysis can be created for subsequent print-out.

Many organizations, regardless of size, can benefit with random access data processing. A UNIVAC 1004 or 1005 equipped with Unidisc offers faster, more efficient operation in such applications as:

- Billing • Inventory & Procurement
- Accounts Receivable • Inventory Control
- Sales Analysis • Production Control
- Order Entry • General Accounting

Simplified Programming

Fastband and Data Search unlock Unidisc's inherent high-speed random access capabilities. A single computer instruction, the Data Search command, locates and reads the record . A unique indexing principle, Fastband, is the key to combining simplified programming with high-speed operation, while conserving computing power. Data is checked automatically after reading or writing.

Fastband has a series of identifiers which breaks down the information stored on the disc and positions the read/write heads over the desired record without going serially through all the data on the disc. This Fastband technique simplifies file layout, and eliminates extensive systems design and elaborate programming schemes for random access addresses.

Economy

Unidisc is extremely economical. A UNIVAC 1004 or 1005 equipped with Unidisc pays off in random-access handling of both routine and specialized data processing applications. All necessary information to completely process each transaction is available to the 1004/1005 Central Processor. Since up-to-date information is in Unidisc's files, many clerical and preparatory machine operations, such as preliminary sorting, are eliminated. For example, credit checks and pricing runs could be avoided in an order entry application, as could wage rating in a payroll application.

Expandable Capacity

Storage capacity becomes virtually unlimited with Unidisc, since it is a simple matter to add more discs as your volume of data expands. In addition, up to five slave handlers can be added to the master Unidisc handler, if more information must be on line. A Unidisc library provides an inexpensive, permanent record of your company's operations, either historical or
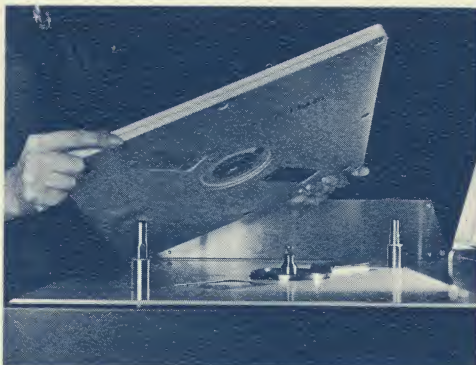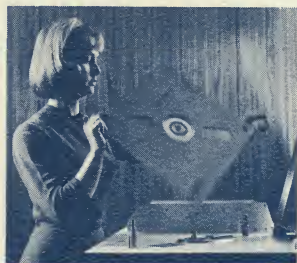
current. And, it is possible to expand
the program memory of UNIVAC
1005 Central Processors by storing
additional instructions in Unidisc.

Ease of Operation

Lightweight Unidiscs are easy to
mount, handle and store—designed
with the user in mind. Changing
a disc is no harder than changing a
phonograph record or a reel of
magnetic tape. Your operating
personnel can be trained to mount
cartridges and operate handlers
in a matter of minutes.

Unidisc cartridges measure 15¾
inches square and ⅝-inch thick. They
can be labeled and stored on edge,
as easily as phonograph albums.

Fast Access

The average time required to locate
and *read* a record on a random basis is
approximately 135 milliseconds,
most of which is required for head
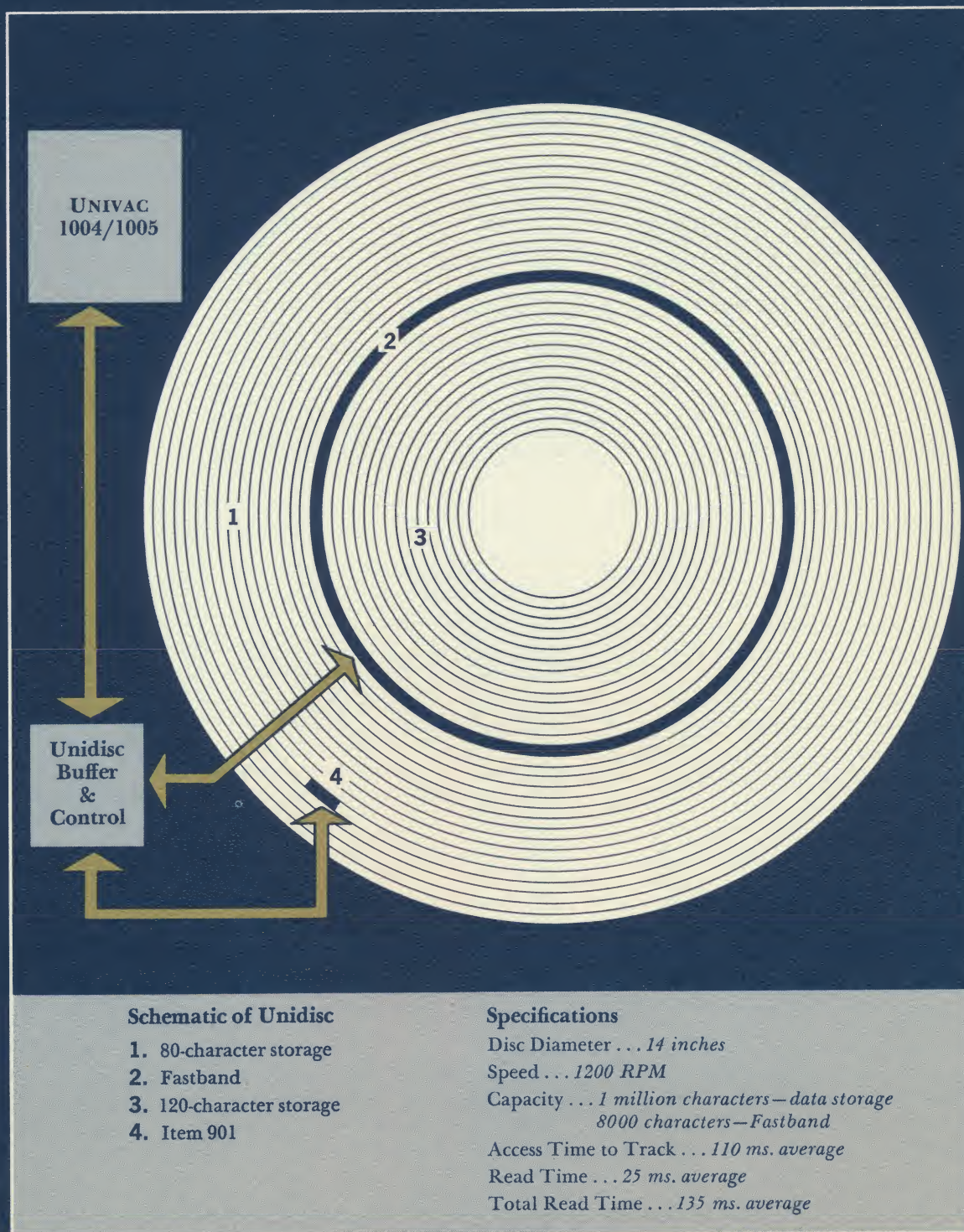movement. Since the read/write
heads are already positioned over the
track , the updated record can
be written on Unidisc and checked
in an average of 75 milliseconds.

Data Reliability

A combination of parity, bit count,
and phase error checking assures
that correct data is recorded. As
entries are made, check characters
are developed and stored with
the data. Write operations are
automatically followed by read-backs
of the data recorded. All read
operations include automatic
verification of the data read by
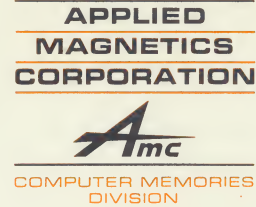check character validation.

*disc*ription

UNIVAC
1004/1005

Unidisc
Buffer
&
Control

Schematic of Unidisc

1. 80-character storage
2. Fastband
3. 120-character storage
4. Item 901

Specifications

Disc Diameter . . . *14 inches*

Speed . . . *1200 RPM*

Capacity . . . *1 million characters — data storage*
8000 characters — Fastband

Access Time to Track . . . *110 ms. average*

Read Time . . . *25 ms. average*

Total Read Time . . . *135 ms. average*

**APPLIED
MAGNETICS
CORPORATION**

COMPUTER MEMORIES
DIVISION

TO: Mr. T. Nelson,

Thank you for your inquiry. The name of our company was
changed the first of the year from Computer Accessories
Corporation to Applied Magnetics Corporation/Computer
Memories Division.

The literature you requested on our MDM-12 Magnetic Disc
Memory is enclosed. This new random access storage device,
featuring reliable head-per-track design, is available with
capacities up to 16,896,000 bits. In addition to the standard
models listed on the data sheet, modularity permits special
versions, tailored to the user's requirements, to be econom-
ically produced.

Already in use by two major computer manufacturers, the
MDM-12 is compiling an enviable record for high-reliability
in service, reflecting the test results achieved in our laboratory
during development.

The MDM-12 can be supplied with track selection diodes or
with complete buffered or unbuffered read/write electronics.
Please let us know if you would like further information.

Very truly yours,

R. E. Norris
Marketing Manager

REN:e-

Enclosure